4.0 COMPLIANCE WITH APPLICABLE FEDERAL ENVIRONMENTAL STATUTES AND REGULATIONS

This chapter identifies and briefly describes Federal statutes, implementing regulations, and executive orders potentially applicable to the proposed action and alternatives. The following sections provide a brief summary of the relevant aspects of the respective law, regulation, or executive order. The conclusions on compliance are based on the impact analysis presented in Chapter 3, Affected Environment and Environmental Consequences, and the appendices.

4.1 National Environmental Policy Act

This Final Environmental Impact Statement (FEIS) was prepared pursuant to Council on Environmental Quality (CEQ) and United States Army Corps of Engineers (USACE) regulations implementing the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321 et seq.). NEPA provides a commitment that Federal Agencies consider the environmental effects of their actions. It requires that an EIS be prepared for major Federal actions significantly affecting the quality of the human environment. The EIS must provide detailed information regarding the proposed action and feasible alternatives, the environmental impacts of the alternatives, potential mitigation measures, and any adverse environmental impacts that cannot be avoided if the proposal is implemented. Agencies are required to demonstrate that these factors have been considered by decision makers prior to undertaking actions. USACE determined that issuance of a Clean Water Act (CWA) §404 permit to Emerald Creek Garnet, Ltd. (ECG) for the expanded mining operations would constitute a "major federal action" and thus requires an EIS.

This EIS was prepared pursuant to NEPA for the no action and five action alternatives. In late 1998, a public scoping meeting was held to receive comments and identify issues to be addressed in the EIS. In addition to the public scoping meeting, numerous agency coordination meetings, on-site field visits and reviews, and telephone and e-mail consultations were held to discuss the project, alternatives, potential impacts, and mitigation options. After publication of the DEIS, USACE solicited comments from agencies, tribes, organizations, and individuals. Chapter 8 identifies all commenters, presents each comment, and describes how the comments were addressed.

4.2 Wetlands Protection

Potential effects of the proposed alternatives on wetlands are described in section 3.2 and in Volume II Appendix D.

4.2.1 Section 404 of the Clean Water Act

§404 of the CWA of 1972 (USC 1344) establishes a program to regulate the discharge of dredged and fill material into the waters of the United States (U.S.). This act requires authorization from the Secretary of the Army, acting through USACE, for the discharge of dredged or fill material into all waters of the U.S., including wetlands. Discharges of fill material generally include, without limitation: placement of fill that is necessary for the construction of any structure or impoundment requiring rock, sand, dirt or other material for its construction; site development fills for recreational, industrial, commercial, residential, and other uses, causeways or road fills; dams and dikes; artificial islands; property protection or reclamation devices such as riprap, groins, fill

associated with the creation of ponds; and any other work involving the discharge of fill and dredged material. A USACE permit is required whether the work is permanent or temporary. Examples of temporary discharges include dewatering of dredged material prior to final disposal, and temporary fills for access roadways, cofferdams, storage, and work areas. The 404 program is administered by both USACE and the U.S. Environmental Protection Agency (USEPA). USACE has the primary responsibility for the permit program. In evaluating individual §404 permit applications, USACE carries out a public interest review. The review involves balancing such factors as conservation, economics, aesthetics, wetland protection, cultural values, navigation, fish and wildlife values, water supply, and water quality. USACE regulations are promulgated under Title 33 of the Code of Federal Regulations (CFR), Parts 321-330. USEPA's responsibilities are described under section 4.2.4 below.

USACE has determined that ECG must obtain a Department of the Army Permit under §404 of the CWA. Information contained in this EIS serves as the analytical basis for a decision whether to issue, issue with modifications or conditions, or deny a CWA §404 permit for the proposed discharge of dredged and fill material associated with garnet mining in approximately 133 acres of wetlands and other waters of the U.S.

4.2.2 Executive Order 11990 Protection of Wetlands

Executive Order (EO) 11990 encourages federal agencies to take actions to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands when undertaking Federal activities and programs. Any agency considering a proposal that might affect wetlands must evaluate factors affecting wetland quality and survival. These factors should include the proposal's effects on the public health, safety and welfare due to modifications in water supply and water quality, maintenance of natural ecosystems and conservation of flora and fauna, and other recreational, scientific and cultural uses. In addition, this Executive Order establishes a policy on no net loss of wetland for any Federal action that may affect wetlands. This requires Federal agencies with regulatory authority over actions to avoid, to the extent possible, adverse impacts associated with the destruction or loss of wetlands if a practicable alternative exists (40 CFR Part 6, Section 302). The proposed garnet mining in 133 acres of wetlands would not result in net loss of wetlands after reclamation is complete, but rather would result in a net increase in wetlands. See section 3.2, Wetlands, for a discussion of wetland impacts and reclamation and replacement.

4.2.3 Executive Order 19988 of 1977, Floodplain Management

This Executive Order was established to avoid, to the extent possible, the adverse impacts associated with floodplain development (40 CFR Part 6, Section 302). Section 3.1, Water Resources, discusses impacts associated with mining in the St. Maries River floodplain.

4.2.4 Environmental Protection Agency's 404(b)(1) Guidelines

USEPA's CWA §404 (b)(1) guidelines (40 CFR 230) are used to evaluate direct, indirect, and cumulative impacts to wetlands that would be caused by each of the proposed alternatives. This evaluation is used to determine the least environmentally-damaging practicable alternative (LEDPA). Under these guidelines only the alternative determined to be the LEDPA would be issued a Department of the Army permit by USACE (see section 4.2.1 above).

4.3 Endangered and Threatened Species and Critical Habitat

4.3.1 Endangered Species Act

The Endangered Species Act (ESA) (16 USC 1531-1544), amended 1988, establishes a national program for the conservation of threatened and endangered species of fish, wildlife, and plants and the habitat upon which they depend. Section 7(a) of the ESA requires Federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), as appropriate, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats. Consultation with the USFWS and NMFS regarding potential effects of the proposed alternatives was initiated by USACE. Volume I Appendix D contains agency consultation and coordination letters.

Section 7(c) of the ESA and the federal regulations on endangered species coordination (50 CFR §402.12) require that federal agencies prepare biological assessments (BAs) of the potential effects of major actions on listed species and critical habitat. A BA for Federally Listed Plant Species is included in Volume I Appendix E. In addition, a consolidated BA summarizing the findings in Volume II Appendices F, G, and H has been prepared for agency review (Science Applications International Corporation [SAIC] 2003). In response to USFWS comments on the DEIS (see Chapter 8), USACE prepared an amended BA for USFWS review. The amended BA is presented in Volume I Appendix E. USFS concurrence with the amended BA is found in Volume I Appendix D.

4.4 Fish and Wildlife Conservation

Potential effects of the proposed alternatives on fisheries, wildlife, and special status species have been examined in sections 3.4 and 3.5 and Volume II Appendices F, G, H, and I. Consultation and coordination letters are included in Volume I Appendix D.

4.4.1 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) of 1980 (16 USC 661 et seq.) provides for the conservation and management of fish and wildlife by encouraging cooperation between the USFWS and other federal, state, and local public agencies, as well as private agencies. Further, it calls for consultation with USFWS when any water body is impounded, diverted, controlled, or modified for any purpose. USFWS and state agencies charged with administering wildlife resources are to conduct surveys and investigations to determine the potential damage to wildlife and the mitigation measures that should be taken. USFWS incorporates the concerns and findings of the state agencies and other Federal agencies, including NMFS, into a report that addresses fish and wildlife factors and provides recommendations for mitigating or enhancing impacts to fish and wildlife affected by a Federal project. The Federal project must include justifiable measures that address USFWS recommendations and concerns. Federal agencies that construct or operate water-control projects are authorized to modify or add to the structures and operation of those projects to accommodate the means and measures for conservation of fish and wildlife.

USACE has coordinated with the USFWS throughout the preparation of this EIS. See section 3.4. Wildlife for a summary of consultation and Volume I Appendix D for copies of letters from the

USFWS regarding threatened, endangered, and special status species that may occur within the proposed project area.

4.4.2 Migratory Bird Conservation Act

The Migratory Bird Conservation Act (16 USC 715 et seq.) requires that lands, waters, or interests acquired or reserved for purposes established under the Act be administered under regulations promulgated by the Secretary of the Interior. This act involves conservation and protection of migratory birds in accordance with treaties entered into between the U.S. and Mexico, Canada, Japan, and the former Union of Soviet Socialist Republics; to protect other wildlife, including threatened or endangered species; and to restore or develop adequate wildlife habitat. The migratory birds protected under this Act are specified in the respective treaties. In regulating these areas, the Secretary of the Interior is authorized to manage timber, range, agricultural crops, and other species of animals, and to enter into agreements with public and private entities. Section 3.4, Wildlife, addresses potentially affected avian species, as well as other terrestrial species of concern.

4.4.3 Lacey Act of 1900

This law (18 USC §§ 41-47) made it unlawful to take fish, wildlife or plants under federal jurisdiction and prohibited specimens taken illegally from being shipped across state boundaries. This project would not involve taking or shipment of any species.

4.4.4 Executive Order 13186 of January 10, 2001

Federal agencies that take actions that have or are likely to have measurable negative effects on populations of migratory birds are required to develop and implement a Memorandum of Understanding (MOU) with the USFWS. This MOU has to promote the conservation of migratory birds. This project would not have a measurable negative impact on migratory birds; therefore, no MOU with the USFWS is required.

4.5 Heritage Conservation

4.5.1 National Historic Preservation Act

Section 106 of the *National Historic Preservation Act* (NHPA) (16 USC 470) requires that federal agencies evaluate the effects of federal undertakings on historical, archaeological, and cultural resources and afford the Advisory Council on Historic Preservation (ACHP) opportunities to comment on the proposed undertaking. The first step in the process is to identify cultural resources included in (or eligible for inclusion in) the National Register of Historic Places (NRHP) that are located in or near the project area. The second step is to identify the possible effects of proposed actions. The lead agency must examine whether feasible alternatives exist that would avoid such effects. If an effect cannot reasonably be avoided, measures must be taken to minimize or mitigate potential adverse effects. Section 106 compliance has been completed for the project area. An archaeological survey has been completed and the Idaho State Historic Preservation Office (SHPO) has concurred with the findings. Native American consultation has been initiated by USACE.

4.5.2 Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) (16 USC 470aa-470ll) provides for the protection of archaeological sites located on public and Indian lands, establishes permit requirements for the excavation or removal of cultural properties from public or Indian lands, and establishes civil and criminal penalties for the unauthorized appropriation, alteration, exchange, or other handling of cultural properties. No cultural resources have been found in the project area. If significant cultural resources are inadvertently encountered during the mining process, mitigation measures would jointly be developed by USACE in consultation with the Idaho SHPO and Coeur d'Alene Tribe.

4.5.3 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) (25 USCA 3001) addresses the discovery, identification, treatment, and repatriation of Native American and Native Hawaiian human remains and cultural items (associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony). This Act also establishes fines and penalties for the sale, use, and transport of Native American cultural items. Consistent with procedures set forth in applicable federal laws, regulations, and policies, USACE would proactively work to preserve and protect natural and cultural resources, establish NAGPRA protocols and procedures, and allow reasonable access to sacred sites.

4.5.4 American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) of 198 (42 USCA 1996) established protection and preservation of Native American's rights of freedom of belief, expression, and exercise of traditional religions. Courts have interpreted AIRFA to mean that public officials must consider Native American's interests before undertaking actions that might harm those interests. USACE would continue to coordinate with affected Native American tribes.

4.5.5 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Executive Order (E.O) 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000) requires establishment of regular and meaningful consultation with tribal officials in the development of federal policies that have tribal implications, to strengthen the government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates on Indian tribes. USACE has initiated contact with interested Native American groups regarding the proposed action so that potential traditional resource concerns can be identified. The Coeur d'Alene Tribe has indicated a desire to consult on the project (personal communication, Benge 2002). Volume I Appendix D contains copies of consultation correspondence.

4.6 State, Area-Wide, and Local Plan and Program Consistency

CEQ regulations for implementing NEPA (40 CFR §1506.2) require agencies to consider the consistency of a proposed action with approved state and local plans and laws. The Benewah and Shoshone county plans and ordinances apply to the project area. State and local government

agencies operate a variety of recreational, infrastructure, and related resources along the St. Maries river system. Impacts to these resources that could result from the various alternatives are identified in Chapter 3.

4.7 Floodplains

If a federal agency program will affect a floodplain, the agency must consider alternatives to avoid adverse effects in the floodplain or to minimize potential harm. Executive Order 11988 requires Federal agencies to evaluate the potential effects of any actions they might take in a floodplain and to ensure that planning, programs, and budget requests reflect consideration of flood hazards and floodplain management. The impacts of the proposed alternatives on flood control are evaluated in Chapter 3.

4.8 Farmland Protection

4.8.1 Farmland Protection Policy Act

The Farmland Protection Policy Act (7 USC 4201 et seq.) requires federal agencies to identify and take into account the adverse effects of their programs on the preservation of farmlands. The proposed action was determined to have no direct impact with regard to the physical deterioration and/or reduction in productivity of farmlands.

4.8.2 CEQ Memorandum, August 11, 1990, on Analysis of Impacts on Prime or Unique Agricultural Lands

The CEQ Memorandum establishes criteria to identify and consider the adverse effects of Federal programs on the preservation of prime and unique farmland; to consider alternative actions, as appropriate, that could lessen adverse effects; and to ensure federal programs are consistent with all state and local programs for protection of farmland. The proposed action was determined to have no direct impact on prime or unique agricultural lands.

4.9 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (16 USC 1278 et seq.) designates qualifying free-flowing river segments as wild, scenic, or recreational. The Act establishes requirements applicable to water resource projects affecting wild, scenic, or recreational rivers within the National Wild and Scenic Rivers System, as well as rivers designated on the National Rivers Inventory. Under the Act, a Federal agency may not assist the construction of a water resources project that would have a direct and adverse effect on the free-flowing, scenic, and natural values of a Federally designated wild or scenic river. If the project would affect the free-flowing characteristics of a designated river or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area, such activities should be undertaken in a manner that would minimize adverse impacts and should be developed in consultation with the National Park Service (NPS). No wild and scenic rivers are located within the St. Maries River basin.

4.10 Clean Air Act

The Clean Air Act (CAA) (42 USC 7401 et seq.) was established "to protect and enhance the quality of the nation's air resources so as to promote public health and welfare and the productive capacity of its population." CAA authorizes the USEPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The CAA establishes emission standards for stationary sources, volatile organic compound (VOC) emissions, hazardous air pollutants, and vehicles and other mobile sources. The CAA also requires the states to develop implementation plans applicable to particular industrial sources. The Air Quality Division (AQD) of the Idaho Division of Environmental Quality (IDEQ) implements the CAA in Idaho to ensure that all sources comply with the NAAQS. Since project sources are mobile in nature, they would not require air permits from the AQD and therefore would comply with the NAAQS. Section 3.12 presents an evaluation of project compliance with the CAA.

4.11 Federal Water Pollution Control Act

The Federal Water Pollution Control Act (Clean Water Act 33 USC 1251 et. seq.) is more commonly referred to as the Clean Water Act (CWA). This act is the primary legislative vehicle for federal water pollution control programs and the basic structure for regulating discharges of pollutants into waters of the U.S. The CWA was established to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The CWA sets goals to eliminate discharges of pollutants into navigable water, protect fish and wildlife, and prohibit the discharge of toxic pollutants in quantities that could adversely affect the environment. Point source discharges of storm water from this project require permitting under CWA §402.

4.11.1 Section 401 of the Clean Water Act

§401 of the CWA requires anyone applying for a permit which may result in a discharge to navigable waters to obtain §401 Water Quality certification. Within the State of Idaho, the DEQ is the certifying agency. Until §401 certification is obtained from DEQ, USACE cannot issue a §404 permit for the proposed action or alternative action.

Within Idaho, the Idaho Water Quality Standards provide for the designation of certain waters as Special Resource Waters. Water quality cannot be lowered in waters that have this designation. Portions of the St. Maries River that are contained within the project area are designated as Special Resource Waters and therefore must comply with IDAPA 58.01.02 and the higher level of standard afforded waters with this special designation.

The St. Maries River, including nearly all of the stream segments in its watershed, is listed as water quality limited under §303(d) of the CWA for not meeting designated uses identified by the DEQ under the Idaho Administrative Code (IDAPA 58.01.02). Because a TMDL (IDEQ July 2003) has been completed, IDEQ's §401 certification would need to ensure that the discharge of pollutants would be conducted in a manner consistent with the TMDL (IDPA 58.01.02.054.04).

To obtain §401 certification, be in compliance with the TMDL, and acquire National Pollutant Discharge Elimination System (NPDES) storm water permits (see Section 4.11.2 below), ECG would be required to implement watershed improvement projects that would result in sediment load reductions (i.e., credits) that are greater than the amount of sediment that would be generated

throughout the life of the mining project. In general, sediment reductions (i.e., credits) from these projects must be achieved prior to, or in conjunction with, the construction and mining activities that may result in sediment discharges. Guidance for conducting studies and implementing water quality trading policies are provided by the *Pollutant Trading Guidance* (DEQ 2003b) and *Water Quality Trading Policy* (USEPA 2003). ECG has submitted to DEQ a work plan that describes the water quality modeling to be implemented in order to predict current sediment loads that would be reduced by various mitigation projects other than mitigation that is part of the proposed action.

4.11.2 Section 402 of the Clean Water Act

§402 of the CWA requires all discharges of pollutants to waters of the U.S. to be authorized by a permit under the NPDES. There would be no discharge of wastewater, or of pollutants, under normal operating conditions, so no NPDES permit is needed for such discharges.

There could be discharges of storm water runoff from the proposed mining operation, and these discharges would be covered by an NPDES permit. Prior to operation, ECG would develop and implement storm water pollution prevention plans and obtain permit coverage from USEPA Region 10 for potential storm water discharges. ECG would require coverage under two general permits issued by USEPA:

- Discharges from temporary haul roads, from overburden stockpiles, and from the outer edges of berms would be authorized under USEPA Region 10's Construction General Permit (permit number IDR100000). Permit coverage would be needed from the time of initial disturbance until final reclamation.
- Discharges from the runon diversion ditches that surround the mining panels, and discharges from extreme storm events, would be covered under USEPA's NPDES Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities (known as MSGP-2000), Sector J (Mineral Mining and Dressing). Permit coverage would be needed before operations begin.

The TMDL established the reductions in sediment loads that would be needed for the St. Maries River to meet water quality standards. To quality for coverage under the general permits, ECG is required to be in compliance with the TMDL (see 4.11.1).

4.12 Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low Income Populations

This E.O. directs federal agencies to identify and address, as appropriate, disproportionately high and adverse health and environmental impacts on minority and low-income populations. The range of mining alternatives considered in this FEIS do not produce a substantial change with regard to the health or environmental impacts on minority and low-income populations.

4.13 Executive Order 13045, Protection of Children from Environmental Health and Safety Risks

This E.O. requires federal agencies to ensure that their policies, programs, activities, and standards address potential risks that may disproportionately affect children. It defines environmental health and safety risks as: risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest. The range of mining alternatives considered in this FEIS does not produce a substantial risk to the health and safety of children.

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